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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,863	06/27/2002	Franciscus Antonius Jozef Van Boekel	0702-020284	7356
7590	05/06/2003			
Russell D Orkin 700 Koppers Building 436 Seventh Avenue Pittsburgh, PA 15219-1818			EXAMINER [REDACTED]	HEITBRINK, TIMOTHY W
			ART UNIT 1722	PAPER NUMBER

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

The disclosure is objected to because of the following informalities: the specification mentions claims 9-11 and 17 on pages 6 and 9 to describe the invention. The specification should not depend upon the claims for an adequate description of the invention. Also, "sealing element 18" (page 8, lines 6,7) or "sealing ring 18" (page 8, line 8); "hard surface layer 29" (page 4, line 5) or "recess 29" (page 8, line 9) Appropriate correction is required.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "shoulder part 28" (page 6, line 31). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 34,38 and 39. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mould coated with Kapton (trademark) and enclosed in a metal cage as well as the control apparatus connected to a computer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The use of the trademark Teflon and Kapton has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 3, 14 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, "with shrink fit" what? The Examiner suggests deleting "is provided with" should be changed to --will-- and "on" changed to --onto--.

In claim 14, "the nozzles" is incorrect. The Examiner suggests changing "nozzles" to --nozzle parts--.

Claim 18 contains the trademark/trade name Kapton. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope

is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a material and, accordingly, the identification/description is indefinite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-7, 13, 16, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gellert et al. (US Patent 5955121).

Gellert et al. '121 discloses an injection molding device comprising a mold 18 which defines a mold cavity 16, in which mold is provided a flow channel 10, 82, 84, 86, 44 which flow channel extends through a manifold and a number of nozzles 24 connected to the manifold, the flow channel containing a number of transverse separating surfaces between nozzle 24 element 68 where a sealing element located in the flow channel 66 bridges the surfaces. See Fig. 3.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. (US Patent 5955121).

While it is not disclosed in '121 the sealing element having a size where the ratio of the diameter of the flow channel, wall thickness of the bush and height of the bush equals 22:2:10, such a size is considered within the skill of the ordinary artisan when operation of the device is not otherwise modified as set forth in *In re Dailey et al*, 149 USPQ 47.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. ('121) as applied to claims 1,5-7,13,16 and 17 above, and further in view of Juel.

While Gellert et al. ('121) does not disclose semicircular clamping plates (forming a ring clamp) to join parts of the nozzle, Juel in the analogous art of extrusion molding teaches a nozzle having parts joined together by semicircular clamping plates forming ring clamps 4,6,8.

It would have been obvious to one having ordinary skill in the art at the time the invention was made use semicircular clamping plates to secure the nozzle parts together as suggested by Juel.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. ('121) as applied to claims 1,5-7,13,16 and 17 above, and further in view of Gellert et al. ('784).

While Gellert et al. ('121) does not disclose dual heaters and dual thermocouples, Gellert et al. ('784) discloses heaters 102 and 106 used to heat different

parts of a nozzle at separate temperatures each having its own thermocouple to maintain the material therein at a proper temperature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use dual heaters (each with its own thermocouple) in the nozzle of Gellert et al. ('121) in order to heat different parts of a nozzle at separate temperatures each having its own thermocouple to maintain the material therein at a proper temperature as suggested by Gellert et al. ('784).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. ('121) as applied to claims 1,5-7,13,16 and 17 above, and further in view of Linchan.

While Gellert et al. ('121) does not disclose a computer used to the injection moulding device, Linchan teaches a computer connected to an injection moulding device to control the heat applied thereto.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the injection moulding device of Gellert et al. to a computer as suggested by Linchan.

Claims 2 and 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The above claims define over the prior art since the prior art fails to disclose or suggest a sealing element which will shrink fit on the structural components.

Claims 8-12 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The above claims define over the prior art since the prior art fails to disclose or suggest an additional seal formed by self-sealing sealing rings, structural components formed by the manifold and a nozzle and wiring coated with Kapton and enclosed in a metal cage as set forth in the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Heitbrink whose telephone number is 703-308-3789. The examiner can normally be reached on Tuesday-Friday 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Tim Heitbrink
Primary Examiner
Art Unit 1722

twh
May 2, 2003

5-2-03